



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,348	09/29/2005	Etsuko Koyanagi	44471/311941	8308

23370 7590 06/18/2010

JOHN S. PRATT, ESQ  
KILPATRICK STOCKTON, LLP  
1100 PEACHTREE STREET  
SUITE 2800  
ATLANTA, GA 30309

EXAMINER
----------

COONEY, ADAM A

ART UNIT	PAPER NUMBER
----------	--------------

2444

MAIL DATE	DELIVERY MODE
-----------	---------------

06/18/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/523,348	<b>Applicant(s)</b> KOYANAGI ET AL.	
	<b>Examiner</b> ADAM COONEY	<b>Art Unit</b> 2444	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-4, 10-21, 26-28, 32, 33, 48, 49, 73, 74, 76-78 and 81-86 is/are pending in the application.
- 4a) Of the above claim(s) 26-28, 32, 33, 48, 49, 73, 74 and 81-86 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-4, 10-21 and 76-78 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/24/2009 and 12/02/2009</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 26-28, 32, 33, 48, 49, 73, 74 and 81-86 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant elected Group 1 consisting of claims 2-4, 10-21 and 76-78. Election was made **without** traverse in the reply filed on 3/23/2010.

### ***Response to Arguments***

2. Applicant's arguments, filed 12/02/2009, see page 1 with respect to the requirement for information has been considered. The examiner notes that the applicant supplied the required information.

3. Applicant's arguments, filed 12/02/2009, see page 1 with respect to the objection of claim 48 has been fully considered but is moot due to claim 48 being withdrawn.

4. Applicant's arguments, filed 12/02/2009, see pages 2-9 with respect to the rejection of claims 2-4, 10-12, 14-16 and 18-20 under 35 U.S.C. 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Elek et al. (Admission Control Based on End-to-End Measurements). Elek teaches admission control is when a host probes the path to a receiver before sending actual data. The host accepts the session if the probe is received with no or at most a moderate amount of loss. Therefore, as shown below in the rejection Elek teaches all the limitations of claims 2-4, 10-12, 14-16 and 18-20.

Art Unit: 2444

5. Applicant's arguments, filed 12/02/2009, see pages 9 and 10 with respect to the rejection of claims 13, 17, 21, and 76-78 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Elek and Graham. Graham teaches bandwidth management processes and systems, a centralized call admission control/usage monitor module determines what to charge the client. Therefore, as shown below in the rejection Elek and Graham teach all the limitations of claims 13, 17, 21, 76 and 78.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 2-4, 10-12, 14-16 and 18-20 are rejected under 35 U.S.C. 102 (b) as being anticipated by Elek et al. (Admission Control Based on End-to-End Measurements).**

6. **Regarding claims 2 and 10**, Elek teaches a method and means for sending packets of a trial class for a predetermined period from a caller terminal apparatus (*see Abstract lines 8-10, section II(B) second paragraph line 1 and section II(C) second paragraph line 1; host sends probe for a time period*) ;estimating whether or not the communication quality of the packets is sufficient; if it is sufficient, sending packets of a priority class thereafter (*see Abstract lines 10-11, section I fourth paragraph lines 4-7 and section II(C) fourth paragraph lines 2-3; if probe loss probability is below a threshold actual data is sent*); if it is insufficient, stopping to send

Art Unit: 2444

packets of the trial class for a second predetermined period (*see section II(B) third paragraph; loss rate of probe experience not sufficient therefore sender stops for a random time before issuing a new probe*); after the second predetermined period, estimating according to a communication quality level of the preceding trial-class packets whether or not it is possible to send packets of the trial class; and if it is possible, again sending packets of the trial class for the predetermined period from the caller terminal apparatus (*see section II(B) second paragraph and third paragraph; probes are used to measure the capacity available, and are only forwarded if capacity is available and based on the loss rate, therefore after waiting the "random time" the probes are reissued based on capacity available and loss rate, meaning communication quality*).

7. **Regarding claims 3 and 14**, Elek teaches a method and a means for sending packets of a trial class for a predetermined period from a caller terminal apparatus (*see Abstract lines 8-10, section II(B) second paragraph line 1 and section II(C) second paragraph line 1; host sends probe for a time period*); estimating whether or not the communication quality of the packets is sufficient; if it is sufficient, sending packets of a priority class thereafter (*see Abstract lines 10-11, section I fourth paragraph lines 4-7 and section II(C) fourth paragraph lines 2-3; if probe loss probability is below a threshold actual data is sent*); if it is insufficient, stopping to send packets of the trial class for a second predetermined period (*see section II(B) third paragraph; loss rate of probe experience not sufficient therefore sender stops for a random time before issuing a new probe*); after the second predetermined period, estimating whether or not it is possible to send packets of the trial class according to an execution probability (max/total, where "total" represents the number of packet transfer apparatuses trying to send packets of the trial class within a certain time unit, and "max" represents the maximum number of packet transfer

Art Unit: 2444

apparatuses trying to send packets of the trial class within the certain time unit and allowed to successfully transfer the packets of the trial class without deteriorating a communication quality) estimated from a communication quality of the preceding trial-class packets; and if it is possible, again sending packets of the trial class for the predetermined period from the caller terminal apparatus (*see section II(B) second paragraph and third paragraph and section III(A); probes are used to measure the capacity available, and are only forwarded if capacity is available and based on the loss rate, therefore after waiting the "random time" the probes are reissued based on capacity available and loss rate, meaning communication quality, probe loss determined by probabilities such as equations  $P_{cls}$ ,  $P_{pr}$  and  $P_{ex}$* ).

8. **Regarding claims 4 and 18**, Elek teaches a method and means for starting to send packets of a trial class from a caller terminal apparatus (*see Abstract lines 8-10, section II(B) second paragraph line 1 and section II(C) second paragraph line 1; host sends probe for a time period*); estimating from time to time whether or not the communication quality of the packets is sufficient; if it is sufficient and if the sufficient state continues for a predetermined period, sending packets of a priority class (*see Abstract lines 10-11, section I fourth paragraph lines 4-7 and section II(C) fourth paragraph lines 2-3; if probe loss probability is below a threshold actual data is sent*); if it becomes insufficient, immediately stopping to send packets of the trial class and continuously stopping to send packets of the trial class for a second predetermined period (*see section II(B) third paragraph; loss rate of probe experience not sufficient therefore sender stops for a random time before issuing a new probe*); after the second predetermined period, estimating whether or not it is possible to send packets of the trial class; and if it is possible, again sending packets of the trial class from the caller terminal apparatus (*see section*

Art Unit: 2444

*II(B) second paragraph and third paragraph; probes are used to measure the capacity available, and are only forwarded if capacity is available and based on the loss rate, therefore after waiting the "random time" the probes are reissued based on capacity available and loss rate, meaning communication quality).*

9. **Regarding claim 11**, Elek teaches all the limitations of claim 10, as discussed above.

Further, Elek teaches wherein each of the terminal apparatuses has each of the means (see section 1 first paragraph lines 9-14; discloses telephony call therefore it is inherent that terminal apparatuses would be used).

10. **Regarding claim 12**, Elek teaches all the limitations of claim 10, as discussed above.

Further, Elek teaches wherein each of the packet transfer apparatuses has each of the means (see section II (B) second paragraph; routers).

11. **Regarding claim 15**, Elek teaches all the limitations of claim 14, as discussed above.

Further, Elek teaches wherein each of the terminal apparatuses has each of the means (see section 1 first paragraph lines 9-14; discloses telephony call therefore it is inherent that terminal apparatuses would be used).

12. **Regarding claim 16**, Elek teaches all the limitations of claim 14, as discussed above.

Further, Elek teaches wherein each of the packet transfer apparatuses has each of the means (see section II (B) second paragraph; routers).

13. **Regarding claim 19**, Elek teaches all the limitations of claim 18, as discussed above.

Further, Elek teaches wherein each of the terminal apparatuses has each of the means (see section 1 first paragraph lines 9-14; discloses telephony call therefore it is inherent that terminal apparatuses would be used).

Art Unit: 2444

14. **Regarding claim 20**, Elek teaches all the limitations of claim 18, as discussed above.

Further, Elek teaches wherein each of the packet transfer apparatuses has each of the means (see section II (B) second paragraph; routers).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 13, 17, 21, and 76-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elek in view of Graham et al. (U.S. 6,097,722).**

15. **Regarding claims 13, 17, 21, and 76-78**, Elek discloses the invention substantially as claimed. Further, Elek does not teach wherein the caller terminal apparatus is charged by a call control apparatus for a fee from the time when starting to transfer packets of the priority class.

16. However, Graham does teach such a limitation. According to Graham's bandwidth management processes and systems, a centralized call admission control/usage monitor module determines what to charge the client.

17. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the applicant's invention to have combined Elek's teaching of measurement based call admission control with Graham's teaching of a call admission control monitor determining what to charge a client based on bandwidth measurement, in order to provide Elek's system a way to



Art Unit: 2444

charge a client for real time services such as voice and video communication that include high service quality (see Elek section 1 first paragraph).

***Conclusion***

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADAM COONEY whose telephone number is (571)270-5653.

The examiner can normally be reached on Monday-Thursday and every other Friday from 730AM-5PM..

19. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. C./  
Examiner, Art Unit 2444  
6/15/2010

/William C. Vaughn, Jr./  
Supervisory Patent Examiner, Art Unit  
2444

Application/Control Number: 10/523,348

Page 9

Art Unit: 2444